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Original Communications.

SOURCES OF ERROR IN THE COMMON METHOD OF GIVING CERTIFICATES OF INSANITY.

A paper read before the Dorchester Medical Club, by
W. S. EVERETT, M.D., Hyde Park.

One evening, several months ago, I received a very urgent summons to see a person who was said to be in a fit. The summons was answered without unnecessary delay.

The patient was found upon the floor, lying on his back, with one large, stout Irishman seated astride upon his chest, grasping the wrists firmly, while one or two others were holding the head and legs, in vain but strenuous efforts to overcome the strong muscular contraction which was violently agitating every part of the body.

Such was the spectacle that was presented to me upon entering the room where the patient lay. The propriety of terminating this condition of things, if possible, seemed apparent, whatever the antecedents in the case might be; and sulphuric ether was immediately administered, with the effect of producing complete relaxation of muscular spasm in some four or five minutes, or thereabouts.

When the confusion into which the household was thrown was somewhat abated, and something like order, if not calmness, had been restored, a little reflection was indulged in, and a few particulars of the case obtained.

It is regretted now that no notes were taken at the time, as the case must be written up entirely from memory, and may be inaccurate in some particulars. The pulse was full and bounding, temperature not far from normal, eyes closed. The pupils were not examined till after the administration of ether; the temporal arteries throbbing; fingers not tightly clenched; the patient apparently unconscious, though the motion of arms and legs seemed rather like resistance to restraint than the perfectly involuntary

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action that commonly attends the convulsive spasm.

The history was meagre, and amounted only to this:—The patient was an Irishman, of robust figure, about 25 years old, had recently come from Ireland, and, although a brother of the wife of the man in whose house he was (who, it may be stated, was far advanced in pregnancy), nothing concerning his health or his habits previous to his emigration could be ascertained. He was employed by his brother-in-law, had worked through the day as usual, but had exhibited strange symptoms on the way home; I think had eaten supper, when afterwards, the spasm appearing, the regular family physician was sent for, but not being in, I was called.

The spasm did not return while I remained. The physician first summoned arrived shortly, and I immediately retired, and saw the case no more. Two or three days afterwards, one of the authorities having these matters in charge, brought to me a paper, bearing the signature of the attending physician, certifying that this man was a proper person to be admitted into one of the asylums for the insane, and requested that I should sign it also, which I did. A few days after, I learned that the patient had died in the Asylum at Taunton.

The point to which I wish to call attention, and which seems of sufficient importance to justify a narration of these particulars, is the manner in which physicians are sometimes made to appear to lend the authority of their sanction to measures which their judgment does not approve, especially with reference to these cases of the insane, and their possible removal to asylums upon insufficient or unreliable evidence that they are suitable persons for the restraints of those institutions.

The common course is this:—From certain indications, exhibited in the manner, actions or demeanor of the patient, of disturbance of the mental functions, parties interested arrive at the conclusion that the safety of all concerned, and perhaps their own convenience, require that he be taken

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to the asylum; and to effect that object certain legal processes are gone through. In course of these processes a certificate is required, signed by two physicians, that the person is insane. This certificate is based on observations made at an examination some time within a week preceding its date. If this certificate is sworn to before a justice, the law requires nothing more, and nothing more is commonly done in this direction. I suppose such examinations are not usually very protracted, and a few moments decides the person's fate, and if he happen to be in a silent mood at the time, the evidence relied on is gathered from parties interested, and not from the patient himself.

During a practice of something less than eight years, it has been my fortune to have some part in the removal of ten or twelve persons to one or other of the asylums for the insane. If the same proportion of cases is constantly occurring in the practice of all the physicians of our Society—mostly very much larger than my own—it would seem a matter of sufficient moment to be determined by something more definite than a hasty examination by two physicians, made at some time within a week previous to such removal.

Undoubtedly in the great majority of cases where our sanction is asked, it can very properly be given. But we cannot forget that there are motives controlling the springs of human action, which make it possible that our assent should be asked to give legality, and the appearance of propriety, to the confinement of persons who certainly are out of place in a Lunatic Asylum—wherever their proper place may be.

In the instance referred to, had time been allowed for the true character, and probably speedily fatal termination of the disease to have been developed, undoubtedly the removal to an insane asylum would not have been contemplated. But the peculiar circumstances of the family rendered it impossible for him to have the attention it was supposed he might require, without serious inconvenience; and without very much consideration, in all probability, it was determined on, as affording the most speedy relief from the care, anxiety and trouble that a person in his condition must of necessity be. But after all allowances of this kind, the question still recurs, whether such a person can be placed in a lunatic asylum, without perversion of the purposes for which those great charities were designed.

In another instance, an examination has been requested, of a member of a family,

who, for various reasons, had seemed to require such removal. The examination was made; but nothing was elicited that seemed to justify the proceeding, and I felt obliged to decline being a party to the transaction. Subsequent examinations were not made; possibly they might furnish reason for a change of opinion; and if, hereafter, violence or injury should result from such refusal, I could scarcely avoid the feeling that in some measure I might be responsible. And yet, there was no reason for any other course from any evidence to be obtained.

What is claimed is, that no certificate should be given upon any evidence that is not perfectly conclusive and satisfactory, and that, instead of the single visit at some time within a week of such signature, by two competent physicians, it would be very much more satisfactory, if successive examinations were made at such intervals as might be deemed necessary, until the physician had all the information possible to be obtained from all sources, and that his opinion be neither asked, nor allowed, nor admitted as evidence, until this had been done.

Then, clearly, the opinion of one, even, would be very much more valuable, in any doubtful case, than that of two as now obtained. If the examinations were conducted by two in this manner, a great safeguard against deception and fraud would be established.

I have no means of knowing whether the experiences of others correspond with my own, but the attention that I have been compelled to give to the class of cases that have happened to fall to my share, has convinced me that physicians owe it to themselves, to the community and the profession, to insist on more thorough investigation than can be obtained at a single visit, however rigid the examination might be, in every case where the removal is not made manifestly proper by the violent or dangerous character of the person.

Among all the responsible duties which the physician is called upon to discharge, the signing of a certificate which consigns, not, indeed, to a prison's walls, but to a place of involuntary restraint, for an indefinite period, is not among the least, and certainly demands very close scrutiny, so that while the interests and safety of the community do not suffer, the rights and privileges of citizens shall be respected, and the confidence reposed in the profession shall not be abused.

A CONTRIBUTION TO THE STUDY OF SYPHILIS OF THE NERVOUS SYSTEM.

By R. W. TAYLOR, M.D., Surgeon to the New York Dispensary, Department of Venereal and Skin Diseases.

I CALL this paper simply a contribution to the study of syphilis of the nervous system, because I think that as yet we are merely students in this branch, and that, as such, it is our duty to place upon record such histories of cases, with observations thereon, as may occur to us, in order that, in the course of time, such a mass of material may be accumulated that a comprehensive description of the whole group of these diseases may be written.

I desire, at this time, to present the history of a case of syphilis in which a group of nervous symptoms, of a mild and ephemeral character, were observed, the origin of which was undoubtedly syphilitic. It will, I think, be freely admitted that although we have carefully studied the more common nervous affections due to syphilis, there is a large number of nervous symptoms of a more or less mild character, which, though undoubtedly caused by the action of syphilitic virus, are not as yet fully recognized by authorities as being syphilitic. This is undoubtedly due to two facts: first, that our knowledge of the nervous system, and more particularly that of the sympathetic, in health and disease is as yet far from perfect; and, second, that many of these phenomena may also be produced by chlorosis, leucocythæmia, malaria, lead poisoning, and by the gouty and rheumatic diatheses. I think that in our study of syphilis we are too prone to lay stress upon its visible lesions, and to consider as syphilis only such symptoms as by common consent are admitted as syphilitic. Not that I would advocate that every anomalous symptom occurring in a syphilitic subject should be blindly called syphilitic; but I would urge that observers in meeting such symptoms should carefully and discriminatingly inquire into their etiology; that they would mark their more or less frequent occurrence in such cases, and endeavor to establish the fact as to whether they are due to the syphilitic poison in the system of the patient, or to some other cause. Then I think it will be freely admitted that in the secondary syphilitic period of women, a peculiar analgesia is sometimes observed, for by patient clinical observation that accomplished syphilographer, Dr. Alfred Fournier, has noticed its existence in a number of cases, and by his clinical facts proves that its origin is undoubt-

edly syphilitic, that it is not due to hysteria. The symptoms observed in my case might perhaps have passed as those of an anomalous form of hysteria, and I had that disease fully in my mind in treating it, and directed my treatment in such a manner that the remedies would be beneficial for syphilis and not for hysteria, and I think that the result bears out the diagnosis.

The principal symptoms are supra-orbital pain, vertigo, mental depression, altered disposition, and mild ataxic phenomena, all of which could have been lightly passed over as being hysterical, and were, I think, at first treated as such. Yet an analysis of the case showed that such symptoms had never before evidenced themselves, that the patient was in the secondary period of syphilis, that before she became syphilitic she was neither emaciated nor anæmic, that she had not suffered from malaria, and that, coincidentally with the existence of these symptoms, rheumatoid pains in the tibiae were felt; therefore, I think that the conclusion that they were due to syphilis was perfectly warrantable. When we come to inquire into the pathological condition which caused them, we have to admit that a doubt exists as to whether it was an anemia or a hyperæmia of the brain or its membranes caused by the syphilitic virus, or whether it was due to some unrecognizable impairment of the nutrition of the brain due to blood change. The fact that there was no tendency to gummy deposit elsewhere, and that the symptoms observed a general rather than a local evolution, I think proves that they were due to a diffuse morbid condition rather than to localized gummy deposit.

Carrie M., aged 22, married, contracted from her husband, in March, 1870, an ulcer, which was seated on the inner aspect of the left labium minus. This ulcer was of the parchment variety, was very sluggish in its course, and very soon caused a typical inguinal adenopathy. I prescribed for it mild astringent lotions, but it existed fully six weeks, at the end of which time a general roseolar syphilide was developed. She at the same time suffered from rheumatoid pains, debility, and erythema of the fauces. These symptoms disappeared quite rapidly under treatment, but were followed, in about two months, by a quite copious papular syphilitic eruption. This, again, was treated by mercurials and disappeared, but was followed, in the fall of the year, by a very persistent attack of iritis of the left eye. She then had a respite from pains and eruptions until May, 1871, which was about one year

from the time of the evolution of the first exanthem. At this time she began to complain of a variety of nervous disorders. These symptoms were ushered in by a dull supra-orbital pain, which was quite clearly limited to the supra-orbital region. This pain was continuous in its course, and did not observe any appreciable nocturnal exacerbation. Very soon, she began to feel very dizzy, at first at intervals, and then it became quite a permanent sensation. When she walked she seemed, she said, unsteady in her gait and was not absolutely certain of her security. This symptom even became more pronounced, and a sensation as if she would inevitably fall backwards soon came over her. This peculiar form of vertigo was very intense and of long duration, and though she never at any time lost consciousness, she said she had great difficulty, by means of forced mental effort, in controlling herself from falling. At the time that these symptoms came on, she was residing in the northern part of the State of New York, and was there treated without benefit, probably, I think, for hysteria. At the persuasion of her aunt, she came to New York for the purpose of placing herself under my treatment. When I first saw her, upon her return, she was emaciated, and, contrary to her usual habit, which was cheery, she seemed sad and despondent. Her appetite was not good, but was not at all capricious; her bowels were regular, and she passed daily a normal amount of urine, and her menses were regular. Her pulse was 60 and small, and her temperature was normal. She then had the symptoms I have above described, and besides them she was noticed to be much more irascible than usual, and after the spells of irascibility she would weep copiously, and would for hours remain in a condition of abstraction, not appearing sensible to things that were passing around her. She would go away from the table when eating, imagining that she was not good enough to be in company with others. At other times she would become very suspicious, and would imagine that her friends were conspiring against her, or that they were laughing at her and making sport of her. Under this impression she would become very nervous, and would shrink away and cry, and would perhaps sit hours without moving; and if any one came near her she would, as it were, awaken from her lethargy greatly frightened and be much agitated. These objective phenomena were described to me by her aunt, and some of them I had the opportunity of observing myself. When I

spoke to her, she recognized me very readily and was pleased to see me, and she said she felt grateful for my past services. I asked her if she felt in this strange manner continuously, and she replied that there were intervals in which she was comparatively free from them, and that she tried very much to resist them. She said she felt quite weak, that her memory was very poor in comparison to what it had been, and that in reading a book or paper she very often forgot, when she got through, what she had read. This fact was very apparent, for she was fond of reading the sensational serials in the weekly papers, but her memory was so much impaired that she could not keep the thread of the narrative. She complained of weakness and dimness of vision, and she frequently saw *muscae volitantes* before her eyes. She said, also, that her sleep was very much disturbed, and she frequently awoke greatly alarmed. Upon walking, a sensation of ataxia was noticed, and she said she felt uncertain as to where she was placing her feet. At this time she had nocturnal rheumatoid pains along the tibiae and also in the larger joints. She complained of certain peculiar analgesic symptoms, as a sensation of numbness in the outer aspect of the arm and the back of the hand. I examined her very carefully in reference to the analgesia, and found that it was not very well marked, and that though she did not feel pain from slight pinching or pricking of the backs of her hands, if these procedures were actively tried she flinched from them. I would also add that, according to the statement of her relatives, she had never shown any hysterical tendency, nor had she suffered from fever and ague. I placed her upon a combination of the iodide of potassium with the bichloride of mercury, and in two months her nervous symptoms were cured and her health was improved.

Thus we find that the disturbances were those of intellectuation, of general and special sense, and of the power of coordination. The troubles of intellectuation consisted in an alteration of the disposition of the patient, she becoming melancholy, morose, suspicious and irascible; in the impairment of her memory and in the vertigo. The disturbances of general sensation were well shown by the analgesia and by the supra-orbital pain, and those of the special sense in the weakness of vision. The impairment of the power of coordination was of a mild character, but still quite well marked. Not only did these symptoms wholly vanish under the treatment, but

the general nutrition of the patient was much improved, and she has remained well up to the present time. It is interesting to note the evolution of these symptoms within a year after contagion in a patient upon whom the disease did not manifest itself by gummy new formations.

ULCUS CORNEÆ SERPENS, AND ITS TREATMENT.

By G. E. HATTON, M.D.

This is the title of a small pamphlet, written by Prof. Saemisch, of Bonn, in which he describes a treatment of the disease, by an operation so simple, and with such good results, that in Germany as well as Austria his mode of treatment has been adopted and always given satisfaction where it has been tried. Prof. Arlt, of Vienna, performs a similar operation for abscess of the cornea.

Ulcus corneæ serpens is a deep-seated ulcerative process, situated in the centre of the cornea, or its proximity, generally accompanied by hypopyon, though not always. The disease has a strong tendency to spread over the cornea.

The operation is performed thus. Ether is not needed for the operation in most cases. The patient being placed in a good light, a small incision is made through the centre of the ulcer, with a Graefe cataract knife (about $2\frac{1}{2}$ " or 3" in length), and the purulent matter at once escapes through the wound, thus emptying the anterior chamber of the eye. Then, with one of Weber's probe-pointed knives, the wound is gently enlarged, and the remaining fluid escapes. Any sloughy tissue can be removed with a pair of small forceps. A bandage is applied, and the patient kept one or two days in bed. On the second day, any fluid that has collected can be allowed to escape by gently opening the wound with Weber's knife, and in a few days a marked improvement is seen.

In one case I observed, in the clinic, while assistant to Prof. Saemisch, that the cornea was quite clear, with the exception of a white scar in the centre, where the wound had been made, and with a trivial loss of transparency in the neighborhood. I feel quite sure that all who try this operation will be well pleased with the results.

Prof. Saemisch has 2000 patients during the year, and has performed this operation more than sixty times, and always with good results.

His ophthalmoscopic classes are equal to

any that I have seen anywhere on the Continent, and as he has only one assistant, and students only on certain days, there are excellent advantages for seeing operations and after-treatment.

He never uses ether or chloroform.
Vienna, October 31, 1871.

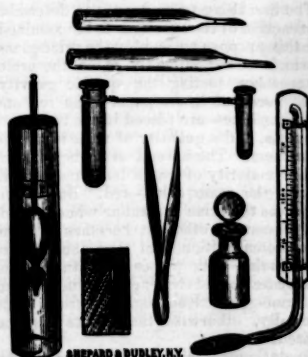
Selected Papers.

A CONVENIENT APPARATUS FOR THE ANALYSIS OF URINE.

By RICHARD A. VANCE, M.D., New York.

It is now several years since that, as an interne at Bellevue Hospital, it became my duty to make a large number of urinary examinations daily. For my own convenience, I had the instrument-maker to that institution, Mr. W. F. Ford, construct me a sort of clinical pocket-case, containing the following articles:—

1. Litmus-paper, red and blue.
2. Two small test-tubes of different sizes.
3. A wire bent into a circle at either end, to receive and support the test-tubes.
4. Specific gravity apparatus.
5. Nitric acid bottle.
6. Platina foil.
7. Pair of forceps.
8. Two pipettes (1 and 2); and
9. An axillary thermometer.



—the whole being neatly enclosed in a leather-covered case, 4 inches long, 2 inches wide, and 1 inch thick, making, when

closed, a very conveniently sized case for the pocket. * * * * *

These few instruments enable the physician to determine quickly, and with a great degree of accuracy:—

1. The reaction of the urine—whether acid, alkaline or neutral.
2. The relative quantity of urea.
3. The relative quantity of solid ingredients.
4. The relative quantity of inorganic ingredients.
5. The relative quantity of organic ingredients.
6. The specific gravity of the urine.
7. The presence or absence of albumen.

When these examinations are repeated daily, a register of the results obtained will be a chart, upon which will be recorded the diurnal fluctuations in the quantity and quality of the urinary excreta. Should the thermometer be used at the same time (and I strongly recommend its employment), these diurnal changes will be found to increase and decrease in a definite ratio to the daily variations of temperature. * * *

In any case where it is deemed advisable to make an examination of the urine, it is always best to have a portion of that passed first in the morning. There are many cases, however, in which it is necessary for the physician to make the examination almost as soon as he sees the patient, and in country practice it is often imperative that the urine be tested at the residence of the patient. In such cases the advantages of this method of analysis are very apparent.

The first thing to be done is to determine the reaction of the specimen to be examined. For this purpose we employ the urine-glass, in which we subsequently place the urinometer when testing the specific gravity. Two pieces of litmus-paper—one red and the other blue—are placed in the bottom of the glass, and a quantity of urine is poured upon them. The normal urine being acid, in the majority of cases both pieces will assume the same color—red. But in certain cases the urine is alkaline when voided, and in certain others it becomes alkaline from decomposition, and then the reverse will obtain—both pieces will turn blue. Great care should be exercised in keeping the urine-glass clean, and free from acids especially, otherwise the results may be vitiated.

To determine the amount of urea in the specimen, place a single drop of urine (which is to be taken from the bottle with the large pipette) on the platina foil, which, with the aid of the forceps, is to be held in

the left hand, and, with the small pipette, add an equal quantity of nitric acid. In normal urine no immediate effect will be produced, but, should there be an excess of urea, crystals of the nitrate of urea will at once make their appearance. In proportion to the excess of urea, this process of crystallization will be rapid and extensive. It will occasionally happen that the liquid on the foil will appear to solidify at once, so quick and complete will be the process. Should nothing of this kind take place, the amount of urea in the specimen is either normal or deficient. To test this latter point, clean the foil, by bringing it to a red heat over a candle or gas flame, and, with the large pipette, place upon it double the quantity of urine used in the former experiment, evaporate slowly, to half its original bulk, and then add to it an equal quantity of nitric acid. Normal urine submitted to this test will at once crystallize; should no change of this nature ensue, the amount of urea is palpably deficient.

A physician who devotes much time to this method of analysis will soon be enabled to do much more than to say that the urea is deficient or in excess; he will be able to estimate the amount present with an accuracy only to be excelled by a quantitative volumetric analysis. To acquire this facility, it is necessary to pay strict attention to the quantities of urine and acid employed, the rapidity and extent of the crystallizing process, and the amount of concentration necessary in certain cases. Another important element, when we desire great accuracy, is the state of the temperature of the room in which the examination is made—heat obstructs, and cold augments, the rapidity with which the crystals are formed. It is a well-known fact that one chemist expert in the use of the blow-pipe will, with the aid of that instrument and a few simple reagents, arrive at results in a few moments, which it will take another chemist, with all the resources of a laboratory at his command, many days to confirm. The skill of the former is due to practice, and the many little points which he has thus acquired would cause him not a little trouble to explain in words. It is the same in the present case—precision requires practice.

After cleaning the foil carefully by raising it to a red heat, as in the former case, we can proceed to test the quantity of solid ingredients present. This is to be done by carefully evaporating a given quantity of urine, and comparing the residue with that obtained from the same amount of healthy urine. The platina foil is to be used for

this purpose, and it is well to accustom ourselves to using the same amount of liquid upon all occasions. The large pipette has a mark near its lower pointed extremity which is intended as a guide for dipping out the urine for this test—the pipette should be filled exactly to that point. In evaporating the urine, care must be taken not to raise the boiling mass to a very high temperature, and in practice it will be found convenient *not* to evaporate all the liquid, but to form an estimate from the pasty mass which is left upon the foil some time before the last of the water disappears. The quantity of this material furnishes the observer with the data from which to form an idea of the amount of solid ingredients in the given specimen. As in testing the amount of urea, continual practice is essential to enable a physician to judge with a great degree of accuracy.

The residue, which gives us our idea of the amount of solid ingredients, can be used in determining the quantities of organic and inorganic constituents, and their relative proportions in a given case. The pasty mass on the foil is to be slowly raised to, and for some time kept at, a red heat—the organic matter is thus dissipated. With the handle of the forceps we can gather together the inorganic ingredients which have remained on the platina, and the difference between their present size and their bulk before incineration will indicate the amount of organic matter driven off by the heat, while the residue will denote the quantity of inorganic materials in the specimen under examination.

The urine which was poured in the urine-glass for the purpose of testing the reaction can now be used for determining the specific gravity. The urinometer is to be placed exactly in the centre of the glass, care being taken to avoid contact between the graduated tube and the walls of the glass. As soon as all motion ceases, the figures at the surface of the urine will indicate the specific gravity of the specimen. The specific gravity of normal urine varies from 1,016 to 1,020, 1,018 being a fair average. There is an old rule, called the rule of Trapp, which, while it is far from being altogether accurate, yet possesses a certain amount of truth, and is well to be known. It states that to determine the amount of solid ingredients in a given specimen, find the specific gravity and then double the two last figures used in expressing that sum. For instance, the specific gravity being 1,018, the amount of solid ingredients is $18 \times 2 = 36$.

In testing for abnormal ingredients, our attention is drawn most prominently and forcibly to the solution of the question of the existence of albumen in the urine. No other substance possesses such interest or is of so much pathological importance. The commonly used tests (heat and nitric acid) are sufficiently delicate, but it is to be feared that, in their general application, their value is more or less impaired by inattention on the part of the examiner to one or more very important rules.

In the first place, the reaction should be accurately noted before applying either test. The reason of this is sufficiently obvious, when we remember that albumen is not coagulated by heat when the urine is alkaline; and that even in normal urine—much more so in a strongly acid specimen—we are liable to be deceived by an abundant deposit of amorphous urates upon the addition of nitric acid.

The reaction having been determined to be acid, the smallest test-tube can be filled one-half full of the urine under examination, and the upper part subjected to the action of heat. The wire-handle will now be found of great service in holding the tube over the candle or gas flame. This test is especially satisfactory in cases where the specimen is more or less opalescent from a deposit of the urates. Heat alone will speedily clear up the solution, and the upper transparent portion will contrast strongly with the cloudy lower layer. The albumen, should any be present, will not coagulate until this change has taken place, and will then declare itself as a beautiful white circle at the upper part of the test-tube, which will persist after the addition of nitric acid. The turbidity commonly produced when neutral or alkaline urine is submitted to the action of heat (due to a precipitation of the earthy phosphates) is readily distinguished from that of coagulated albumen by the fact that the former disappears instantly upon the addition of nitric acid.

The test of universal applicability is that of nitric acid. The reaction of the urine does not interfere with its operation—it is equally efficacious in acid or alkaline solutions. But one caution is necessary, and that is, that in highly concentrated urine a deposit of amorphous urates will occasionally follow its addition, and produce a turbidity which might be mistaken for albumen. "The two conditions are, however, easily distinguished by observing the level at which the cloudiness begins, and the direction in which it spreads. Albumen begins to coagulate immediately above the

stratum of acid, and the turbidity spreads upwards; but the urates appear first at or near the surface of the urine, and the opacity spreads downwards. Heat also readily resolves the doubt, for the urates speedily disappear when the urine is warmed, but turbidity from albumen is not affected by heat."

The following simple plan is one I can commend most thoroughly, and I doubt if those who adopt it will often find themselves disappointed with its facility or accuracy. It is to take the largest of the two test-tubes in this case, fill it two-thirds full of urine, and add the acid by means of the small pipette. The quantity of nitric acid should not exceed five drops, and can be readily estimated by filling the pipette to the horizontal line, near its lower extremity. Then, holding the test-tube in the left hand, carry the point of the pipette to the bottom of the urine and remove the finger from its upper end. The consequence will be that the nitric acid will at once form an even, thin layer at the bottom of the test-tube, and the pipette can be removed without disturbing the contents in the slightest degree. Should there be albumen in the specimen, it will coagulate at the top of the acid, and will be at once plainly apparent. Three distinct layers can then be distinguished: First, the nitric acid; next, the coagulated albumen; and, above that, the urine presenting its ordinary appearance. If both albumen and urates are present—the latter being very common in acid urine—four very distinct layers are formed. At the bottom will be the nitric acid; over it, the coagulated albumen; next, a layer of urine, in which the acid is still so concentrated that it retains the urates in solution, while it is too dilute to coagulate the albumen [Heller]; and above that, again, the cloudy urates.—*N. Y. Med. World.*

Reports of Medical Societies.

BOSTON SOCIETY OF MEDICAL SCIENCES.
EDWARD WIGGLESWORTH, JR., M.D., SECRETARY.

Nov. 7th, 1871.—The Society met at the house of Dr. Jeffries, Dr. Green in the chair. The Secretary's report was read and accepted.

Experiments with Chloral.—Dr. Amory read a series of experiments undertaken to prove whether chloral, in the bodies of animals, is actually decomposed into chloro-

form in the blood, and whether chloroform is eliminated by the pulmonary exhalations. Dogs, and the blood of sheep, were used in these experiments.

He considered that these experiments showed that:—

1st. If a solution of chloral were placed immediately in contact with blood kept at the ordinary temperature of blood in the living animal, chloroform was evolved.

2d. If a solution of chloral was securely enclosed in a fresh sheep's-bladder, and the latter kept immersed in blood at the ordinary temperature of blood in the living animal, chloroform was not evolved.

3d. If the exhalations from the lungs of a dog put to sleep by an ordinary dose of chloral, were tested for chloroform, it did not appear to be present. If, on the contrary, a few drops of chloroform were injected subcutaneously into the same animal, chloroform, in from two to five minutes, appeared in the pulmonary exhalations.

The method employed for determining the presence of the vapor of chloroform was that recommended by Duroy, viz., decomposing the suspected vapors at a red heat, and receiving the chlorine, if present, into a solution of nitrate of silver. The precipitate obtained must be insoluble in nitric acid, soluble in ammonia, and reduced by boiling to metallic silver oxide.

Dr. Amory stated that he did not claim in these experiments to have determined the action of chloral, but that, as he had been a long time in these investigations, he was desirous of relating some of the principal experiments, which he considered settled the fact that, though chloral puts to sleep dogs in the same manner as other animals, yet, in these animals, no chloroform can be detected, during the chloral sleep, in the pulmonary exhalations. Heretofore, it has been supposed by some observers that they could detect the peculiar smell of chloroform escaping from the breath of patients who had taken chloral. This was not an accurate means of determining the presence of this agent, as in small quantities it is extremely difficult to tell by the sense of smell the difference between chloral and chloroform.

Dr. Fitz suggested that the occurrence of an opalescence in the silver solution after chloroform had been injected into the thigh of the animal under the influence of chloral, could hardly be considered as conclusive, unless a controlling series of experiments had been made.

Dr. Amory replied that he had compared a series of controlling experiments with

these related to the Society, but that they only strengthened the results presented.

Dr. Fitz asked if chloroform was said to be eliminated in no other way than through the lungs when chloral was given.

Dr. Amory stated that his experiments were intended to show that chloroform, as indicated by the chloride of silver test, did not make its appearance in the pulmonary exhalations of an animal under the influence of chloral. He had been unable to find in any publication anything to prove that an elimination of chloroform by the emunctories had really taken place. Dr. Richardson, it is true, had stated that he "has obtained a few minims of chloroform distilled from the free (?) mixture of chloral and blood, * * * and that the odor of chloroform in the breath of sleeping animals and * * * tend to show that blood within and without the body liberates chloroform," that is, when chloral has been administered. He does not, however, furnish the details of his experiments, and Dr. Amory doubted if any other chemical test than that of the sense of smell had been used.

In reply to Dr. White, Dr. Amory said he had made no quantitative examination, nor repeated Dr. Richardson's experiments, since these were not to be found.

Microtomy.—Dr. Wadsworth showed the microtome invented by Dr. Curtis, of New York.

Dr. Dwight thought that even large sections could be as well made by hand as with a microtome, and cited Dr. Meynert's sections of the brain, made by hand, and several inches in length and breadth.

Dr. Fitz said that Gröuland, of Paris, used a microtome in making his sections of botanical specimens.

Dr. Bowditch considered Meynert's preparations inferior in beauty and regularity to those made with the microtome.

Dr. Jeffries said that the sections of ophthalmological specimens made by Dr. Curtis, and exhibited at the meeting of the Ophthalmological Society, at Newport, were the best he had ever seen.

Dr. Ellis approved of the weight of the knife for steadiness.

Microscopic Examination of the Retina.—Dr. Wadsworth showed a specimen, from the human retina, of isolated rods and cones, with the rod- and cone-granules, and fibres of the external granular layer attached, under the microscope. It had long been recognized that the rods and cones forming the external layer of the retina were the percipient elements, while the innermost, nerve-fibre layer, conducted the impression

received to the optic nerve and brain. The difficulty had been to show the nervous connection between these two layers: some of the intermediate layers being composed of a meshwork of extremely fine fibres, while in some of the cellular layers it was not easy to distinguish nervous from connective tissue elements. Max Schultze had done much to clear up this difficulty, but modern observers were not yet of accord on all points. As Schultze's views had been given to the Society by Dr. Jeffries, a short time since, he would only allude to some changes in those views, which had recently been published.

The longitudinal fibres on the surface of the rods and cones, forming a sort of sheath, which Schultze had formerly regarded as nerve fibre, he now, in agreement with Landolt and Merkel, considered to be connective-tissue. He also claimed to have discovered that the outer portion of the inner member of the rods and cones is filled by a bundle of extremely fine longitudinal fibres. These he believed to arise from a splitting up of the axis cylinder which filled the innermost portion of the rod or cone and formed the rod- or cone-fibre of the external granular layer, a change occurring at the same time in its chemical nature and refractive condition. The specimen was interesting as showing one step in the connection between the admitted percipient and conducting elements of the retina.

In reply to Dr. Bowditch, Dr. Wadsworth said that the preparation had been first placed in Müller's fluid for a few weeks and then put into alcohol and water.

Dr. Jeffries showed a preparation of suppurative inflammation within the globe of the eye.

Nervous Coördination for special ends.—

Dr. Wyman spoke of some cases he had observed exemplifying the complicated co-ordinations for definite purposes. I. A duck had been shot through the neck and its spinal marrow divided so that its head hung down, yet when returned to the water it began with its legs the movements of swimming in the ordinary way, and so naturally that it would have been impossible for one to say if these were voluntary or not.

II. Two sheldrakes, whose heads had been shot off, and who seemed quite dead, swam in water in the same way, and as their movements occurred only when they were placed in the water, it looked like reflex action.

In reply to Dr. White, Dr. Wyman said that these movements lasted only about one

minute; birds, like other warm-blooded animals, do not furnish evidence of reflex action for so long a time as do cold-blooded animals.

Germination of Parasitic Plants.—Dr. Wyman spoke of the germination of parasitic plants on mucous surfaces. According to Helmholtz, vibrios may be found in the catarrh of "hay cold," &c., and the subsequent observations of others confirm this statement. During a "hay cold," from which he was suffering, Dr. Wyman examined the nasal mucus, but found no vibrios; but opening one day a box of specimens which were packed in straw, he was attacked by a catarrh, the mucus of which showed, within twenty-four hours, spore cases which had sprouted on the nasal mucous membrane.

The parasite was planted in beef-juice, and the next day the spore cases had germinated.

The same thing occurred some four or five weeks later, when he unpacked another similar box. In this case, encysted infusoria (paramesiums) were also found. These, when encysted, dry up and blow away, but give up their covering on the addition of water, and become active when placed in beef-juice. Drs. Bastian and Sansom have stated, at a meeting of the British Association, that the said infusoria, if dry, are destroyed, but this is an error. Vibrios and bacteriums on water in a closed box show only after some time, but in an open box, especially when the water is sown with dust, the infusoria appear much sooner.

In reply to Dr. White, Dr. Wyman said he had examined again for the parasites in his two cases after some time had elapsed, but had not found them, and consequently could not estimate the duration of the process of vegetation. Germs from the air, when they entered the nostril, fell upon a current of mucus moving toward an orifice, and the tendency of this current would be to sweep them away.

Dr. White remarked that the oidium remains and grows for weeks, covering large surfaces of mucous membranes.

Examination of Blood Stains.—Dr. White stated that in examining a suspected blood stain upon a woollen garment by the hæmin test, he had obtained under the action of hot glacial acetic acid and chloride of sodium, crystals resembling in shape those of hæmin or chloride of hæmatin [Teichmann's]. They were, however, undoubtedly crystals of indigotin, extracted from the indigo dye of the thread of cloth

to which the suspected matter was attached. Although the largest of them were of a deep blue color, yet, if formed in the centre of a mass of colored plasma, as the hæmin crystals often are, the palest of them might, by an inexperienced observer, be mistaken for the latter.

Bibliographical Notices.

Diseases of the Skin. Boylston Prize Essay. By B. JOY JEFFRIES, A.M., M.D.

We live, says Wallace, in an abnormal age. The ratio of discovery of the truths of science is, as compared with their diffusion among and acceptance by people at large, disproportionately great. There is, therefore, a special value in such an essay as this of Dr. Jeffries, which collects the latest and best ideas, not of one master but of all, sorts and arranges these systematically and expresses them so clearly and concisely that the general reader becomes in a few hours conversant with what would else have demanded of him a special library, an acquaintance with several languages, weeks of labor and a trained power of discrimination.

The existing confusion in dermatological nomenclature the author justly attributes to those who, having eyes, see not. There is a class of authors already shelf, rather than table-authorities, who resemble gasometers, since it is solely by the destruction of their emanations that the world can become illuminated and enlightened. Those who pin their faith upon such authors will indeed see men as trees walking and tend to the modern belief in omnipresent vegetativeness, but the men exist and exist as men for all that. The obscurity is subjective, not objective. It is the mentality of vision which is at fault. The kohinoor exists, though not yet fully polished, and shrouded to many in a casket of German-silver; for speech is silver. Precisely one of the merits of this essay lies in its evidence of the survival of the fittest nomenclature, and those who adopt that of the author will not go far astray.

The essay is scientific, for it treats largely of the appearances presented under the microscope, that enchanter's wand, at the touch of which the tinsel of hypochondriacal verbosity vanishes into thin air, leaving Truth in *puris naturalibus*; and to which we are to look for the coming nomenclature.

The essay is practical, for it condenses the best treatments almost mnemonically for general use.

Replete with information, interesting in style, unexceptionable in appearance, and very cheap as regards price, we can recommend this essay to all; to the specialist as an Index rerum, to the general practitioner as a *vade mecum* for purposes of treatment, and to the student as a guidepost, showing the direction in which he should pursue his studies.

On the Treatment of Pulmonary Consumption by Hygiene, Climate and Medicine, in its Connection with Modern Doctrines. By JAMES HENRY BENNETT, M.D. Second Edition. Pp. 190. New York: D. Appleton & Co.

Dr. Bennett (not the Edinburgh Professor) takes rather questionable ground, in that he accepts the authority of clinical observation as to points of histological structure, concerning pathological processes, which, in part at least, can be made the subject of experimentation.

Accepting the statements of Professor Bennett in Reynolds's System of Medicine as to the pathological bearings of consumption, without apparently having made, of late at least, independent, continuous study of the morbid appearances, he enters upon the second edition of his essay.

Consumption to him is a term applied to a series of symptoms, and with good reason; more than this, it is "a bountiful dispensation of Providence," serving the purpose of ridding the world of those "unfit to perpetuate the race in its integrity."

It would seem to us much more bounteous if none but the fit were produced, and war, pestilence and famine would select only the poorer specimens of the genus.

Dr. Bennett, as reflected by his book, is a man of sound common-sense, possessed of an unusual amount of *savoir faire*, and a skilful method of expressing his thoughts; qualities which must make of him an eminently successful practitioner.

His book is one which could easily be read both by physician and patient. The latter would be very strongly inclined to think that a winter sojourn at Mentone, combined with other things, would be very likely to restore to him health, provided his disease was not very far advanced.

Dr. Bennett places but little confidence in opiates during the curable stage of the disease. He considers that the benefits to be derived from opium may be obtained

from other sedatives, especially chloral. His great objection to the use of opium is that the appetite is thereby destroyed.

Fresh air, cleanly habits and nourishing diet, with moderate exercise, are the means for restoring strength to the system, and thereby the power of ridding itself of one of its greatest enemies.

The Transactions of the American Medical Association. Vol. xxii. Philadelphia: 1871. Pp. 393.

THE long-promised transactions of the convention held in San Francisco last May have been forwarded us; but why the association which claims a constantly-enlarging influence over everything of a professional character in this country presents us with a volume of 393 pages, when some of its former issues have reached as high as 869, we are at a loss to decide.

The proceedings of the convention we find given substantially as we have already laid them before our readers. Then follow a series of reports of a business character; among others, we learn that the library of the association at Washington contains an aggregate of 339 volumes, together with a considerable number of medical and surgical journals.

Among the papers published by the association, we have examined with interest that of Dr. Geddings, of South Carolina, on Medical Education. It is thoroughly and carefully drawn up; it dwells at some length on the subject of preliminary education, a matter which, we fear, has been too long neglected, but which the advancing state of medical and general education forces most strenuously on our notice. Under the head of Organization of Medical Schools, Dr. Geddings suggests that the number of schools is far beyond the wants of the people, and that such a state of affairs tends to demoralize the character of instruction furnished and to lower the general standard of the profession. Very true, indeed, and we wish the warning which he gives might have an influence in closing a host of the inferior institutions. A thorough review of the systems of education in foreign lands is interesting, and the suggestions for graded courses are in harmony with the methods now being adopted by the schools of best repute among us.

We have no space at our command to review communications on the climatology of different sections, on abortion, on lithotomy and lithotripsy, and other papers. As is its custom, the association publishes the

essays to which prizes were awarded, viz., by Dr. Taylor, of California, on the Chemical Constitution of the Bile, and by Dr. Howard, of New York, on the Direct Method of Artificial Respiration.

Modern Medical Therapeutics; a Compendium of recent Formulæ and Specific Therapeutical Directions. By GEO. H. NAPHEYS, A.M., M.D., &c. Third Edition, revised and improved. Philadelphia: S. W. Butler. 1871. Pp. 496.

THE work of Dr. Napheys has already been noticed in our columns. A second edition within a year has been called for and has given the author opportunity to revise his material and to add seventy pages to the book. Unlike other therapeutical works, this is arranged by diseases, and not in conformity to the articles of materia medica employed; in this way the author believes his work is more fully adapted to the wants of the practitioner. A series of formulæ for hypodermic medication and for inhalation add to the value of the book.

The Physician's Daily Pocket Record; comprising a Visiting List, many Useful Tables, &c. By S. W. BUTLER, M.D. Philadelphia: 1871.

THE visiting list, arranged by Dr. Butler, is already known to the profession. The present edition is arranged on the same plan as those previously issued, and contains a large amount of useful information in the way of tables and practical information.

Medical and Surgical Journal.

BOSTON: THURSDAY, DECEMBER 21, 1871.

CHARCOAL AS AN ANTIDOTE IN PHOSPHORUS POISONING.

IN the *Annales et Bulletin de la Soc. de Méd. de Gand* for February, 1871, we find notice of an interesting series of experiments on antidotes for phosphorus. We take from it the results of the investigation on the action of charcoal in the treatment of poisoning by that drug.

The property of absorption possessed by charcoal in its action on coloring matters, mineral salts and certain alkaloids, suggested to Drs. Eulenburg and Vohl to test it

with regard to phosphorus. When phosphorated oil was filtered through powdered charcoal, away from the air, the result was a liquid wholly wanting in phosphorus. In a second experiment, thirty drops of phosphorated oil were given to a dog, and, shortly after, six grammes of animal charcoal in the form of pills, eighty-six in number, made up with gum tragacanth, were administered. No symptoms of poisoning were seen; there were not seen any indications of the presence of phosphorus in the feces; while in a third experiment, in which the same amount of phosphorated oil was given, followed by only four-tenths of a gramme of charcoal as an antidote, fatal phosphorus poisoning supervened. Other experiments will serve to determine for what poison and in what manner charcoal will be most effectual. The pills used had the advantage of requiring only a small quantity of water and of being easily preserved. The favorable influence of the salts of copper on phosphorus, as indicated by Bamberger, whereby the phosphorus becomes surrounded by a coating of reduced copper so as to prevent farther action, taken in connection with the facts determined by Eulenburg and Vohl, induce those authors to believe that the simultaneous administration of these two agents may be considered the most efficient antidote yet discovered for cases of phosphorus poisoning.

THE TREATMENT OF SYPHILIS.

IN a recent number of the *American Practitioner*, we find an interesting series of hints on the Treatment of Syphilis, from which we make the following abstract:—

The history of a class of cases to which a specialist in venereal diseases is almost daily called, is somewhat as follows. A chancre contracted a year or more ago is followed by secondary symptoms, to which treatment gives temporary but no permanent relief. Gradually the syphilitic lesions in the secondary stage have assumed a more severe type and merged into the full tertiary period. Perhaps there is an obstinate iritis, an affection of the testicle, deep fissures of the tongue, destruction of the soft palate, periostitis or necrosis, or, still worse, epi-

leptiform convulsions, hemiplegia or affections of the viscera.

This is no new thing for the attending physician, who uses the same remedies, and such as are sanctioned by the highest authority, in this as in former cases of syphilis; yet months and perhaps years go by, and his remedies seem to have no effect, and why is it? The answer is found in the varying degree of severity in different cases, and the inadequate use of the remedies employed in the more obstinate ones.

Cases of syphilis may be divided into two classes—the mild and severe. In the former, the symptoms are often of the most insignificant character; the primary sore is superficial and heals in a few days, and the glands in the groin are only slightly enlarged and hard. Rheumatoid neuralgia and a few mucous patches in the mouth may pass for the results of a cold and a disordered stomach. It makes but little difference what remedies are used in these cases; if the patient has a good constitution and leads a regular life, the disease gradually disappears, and the physician has the credit of doing the work of nature. There is another class of cases which are more severe, and which, unless properly met, endanger important, and even vital organs. This severity may be manifest from the first outbreak of secondary symptoms, or only appear in the tertiary period, when the secondary symptoms have been mild. Patients often pass the secondary stage safely, and break out with the most alarming tertiary symptoms. Now in this class of cases it makes a great difference what remedies are used and in what manner.

The treatment commonly in vogue consists only in two remedies, viz., some form of mercury, and the iodide of potassium. Now each of these remedies is more particularly adapted to one stage of the disease than another, yet it is a common practice to use them without the slightest discrimination: the iodide of potassium can have no possible effect in removing the secondary symptoms. In the later stages of syphilis, we see the same lack of discrimination, and we often see practitioners at loss what to do in obstinate cases, blindly employing mercury for a while, then the

iodide of potassium, thus going on for months or years without the least perceptible effect, or any clear idea which remedy is indicated. Another serious mistake is made in the choice of the corrosive chloride of mercury; and the only reason Dr. B. can imagine for this preference is the slight danger of salivation. Yet in using the stronger preparations of mercury salivation can be avoided with moderate care. His own experience with mercury in this disease leads him to the following conclusions:—

1st. Avoid its use in all chancroids and doubtful venereal sores, unless other remedies fail, and the danger to important parts leaves no other resource, or the chancre assumes phagedenic form.

2d. Although a true chancre will heal, and secondary symptoms will disappear spontaneously, yet mercury is the only known agent which has a direct action upon them in tertiary syphilis; the iodide of potassium alone has a remarkable effect in dissipating the symptoms for a time, but the concurrent use of mercury is of great value in preventing their return.

3d. When using mercury for syphilis, use it as the French say—*coup sur coup*—“blow for blow,” that is, give it actively and for short periods, repeated if necessary, rather than in small and long-continued doses. Harm is less liable to result from the former than the latter course, and if the disease has yielded but not disappeared under the first *hit*, you can hit it again.

4th.—In the first treatment of a patient for syphilis, mercury is usually well borne, and works well given by the mouth. But in the first mercurial course that a patient undergoes, the remedy usually acts more effectively and speedily than in succeeding courses, so that there is greater danger of salivation in the first courses, and a patient who has had his gums made tender in a few days, may, in a second or third course, be brought under its influence with great difficulty; and again, since the physiological influence of mercury often rapidly follows the therapeutical, it is well to suspend the treatment or diminish the dose as soon as its decided effect is apparent; and in old cases, when mercury has been used re-

peatedly, its internal use has less effect upon the disease; and, although there is less danger of salivation, yet other ill effects—such as irritation of the intestinal canal, loss of appetite, diarrhoea and general cachexia—are likely to follow; hence, its external use is to be preferred.

5th. For reasons given the corrosive chloride is the least desirable of all the preparations of mercury for internal use. Dr. B. usually employs either the pil. hydrargyri or the protiodide, or sometimes the hydrargyrum cum creta. He most frequently, however, uses the blue mass made into pills of two or three grains each, with the addition of one grain of dried sulphate of iron; one pill to be taken three or four times a day, an hour after eating.

Of the methods of external use, Dr. B. prefers inunction; the plan of fumigation is less repugnant to some patients, but he thinks less efficacious. It is pretty generally conceded that the hypodermic injections in syphilis are not to be recommended.

But to return to the errors too often committed in the treatment of this disease in old and obstinate cases, the most heinous of all is the ignorance among practitioners of the dose of the iodide of potassium requisite to secure the full effect. Some regard doses of two, five and seven grains, given three times a day, as the utmost limit, beyond which it is unnecessary to go. If the symptoms do not yield to this treatment, something else is tried. To think of a patient suffering the nocturnal agony of perioritis, or threatened with destruction of the palate or nose, being thus tampered with is enough to make one's blood boil. The iodide may and must be used with an unsparing hand. Important organs will be saved by giving one hundred grains per day, when the disease only laughs at fifteen or twenty. The iodide of potassium has been given with impunity in the quantity of two or three ounces in the course of the twenty-four hours for several weeks, but Dr. B. finds from a drachm and a half to two drachms is usually sufficient.

Experience teaches Dr. B. that although the iodide of potassium cannot be relied upon alone for permanent relief in the pure tertiary type, yet mercury judiciously used

in connection with the iodide affords greater security. The books tell us that these two agents should not be used together for fear of severe salivation through the evolution of the biniodide of mercury in the system; experience, better than books, teaches that this fear is groundless.

When the patient's secret is in danger of being exposed through the unavoidable staining of the linen, inunction cannot be employed; in such cases do not hesitate to give half a grain to a grain of the protiodide of mercury, combined with two grains of extract of gentian, in pill, at noon after eating, and twenty, thirty or fifty grains of iodide of potassium, morning and night; but Dr. B. prefers to give the same quantity of iodide of potassium three times a day, and rub about a drachm of the mercurial ointment into the skin at night, directing the patient not to wash, but to wear the same clothes night and day for a week or ten days, then to cleanse the whole surface with soap and water, and change his linen; the iodide is to be continued, and the inunction repeated at intervals of a week or fortnight, according to the exigencies of the case. The iodide of potassium should be given after meals, largely diluted with water, to which one or two drachms of compound fluid extract of sarsaparilla of the U. S. Dispensatory may be added.

THE AMERICAN PRACTITIONER.—We are again indebted to our friends, Drs. Yandell and Parvin, for two beautifully bound volumes of the *American Practitioner* for the year 1871; a journal which always finds a ready welcome at our hands, and from which we are glad to make frequent quotations. During the year now closed, the *Practitioner* has well maintained the reputation gained by its first year, and we anticipate a long and successful career for it.

EPITHELIOMA OF THE LARYNX.—P. B., æt. 28, was admitted as an in-patient of the Royal Klinikum, Berlin, under Dr. von Langenbeck. He had had the disease between three and four years. It came on very gradually. During the past few weeks it caused such difficulty in breathing, that, especially at night, he would sometimes

have fits of asphyxia of several minutes' duration. He could swallow well. There were no other abnormal signs in the lungs than those of slight general bronchitis. The man, who was a tradesman, was rather pale and cachectic.

A laryngoscopic examination showed that the entrance of the larynx was free; the epiglottis was normal, as were also the vocal chords, both in movement and outward form. Below the vocal chords could be seen a swelling of raw surface, uneven, which proceeded from the anterior commissure to the left and below the left vocal chord, involving, therefore, the left half of the larynx.

It was first proposed to remove the tumor through the larynx; but this mode of operation was ultimately rejected, because the swelling appeared to have a broad base, and further extended to some distance below the chords, of which, however, there was no abnormal sensibility. The operation of tracheotomy was, therefore, performed on May 25th. An incision was first made through the crico-thyroid membrane, and was extended upwards through the thyroid cartilage nearly as high as the attachment of the vocal chords, and downwards through the cricoid cartilage as low as the third ring of the trachea. The vocal chords were not in any way injured; and, on looking up through the wound, they and their movements could be seen quite distinctly. Immediately on opening the trachea, the tumor showed itself. It was seized with forceps, pulled out, and cut off; and the place where it had sat was well cauterized with *ferrum candens*. The bleeding, which was slight, was arrested easily with a small sponge; a canula was introduced, and the upper end of the skin-wound was closed with one or two sutures.

Bronchitis came on for a day or two, but again gradually subsided, and all went well. The canula was withdrawn on the fifth day, and the edges of the wound were brought together by strips of adhesive plaster.

The patient quickly recovered; the wound healed, with the exception of a small fistulous opening, through which air passes when he coughs or otherwise exerts himself. His previous difficulty in breathing has entirely vanished, and he now awaits his discharge cured.

It had been a question at one time to perform a prophylactic tracheotomy, with the view of introducing Dr. Trendelenburg's canula, which, when introduced, most thoroughly prevents any blood or other

foreign matter from reaching the lungs.—*British Med. Jour.*

USE OF CARBOLIC ACID TO PREVENT PITTING AFTER SMALLPOX.—Dr. Scott, of Dumfries, writes to the Editor of the *Edinburgh Medical Journal*, that having experienced the beneficial effects of carbolic acid in preventing disfiguration of the face in severe cases of burning with gunpowder, and with sulphuric acid, he suggested its employment, with this object, in a number of cases of smallpox. It was applied in the following manner. From the first appearance of the eruption, until the completion of desquamation, the face was kept constantly moist with the solution of the acid, in olive oil (one to eight). The results, he is happy to say, have been most satisfactory; of all the cases treated in the Dumfries Infirmary (several of which were of the confluent type) not one has, on recovery, presented the slightest trace of disfiguration. The application, moreover, was most grateful to the patients' feelings, allaying the itching and irritation, and preventing the desire to scratch off the scabs, which is so annoying to the sufferers in the later stages of the disease. In the case of gunpowder burning, the acid, in addition to its antiseptic and anæsthetic properties, appears to have the effect of dissolving the carbon and of withdrawing it from the skin. In a case treated about twelve months ago by Dr. Scott, by the above described method, the patient, a young gentleman, was so disfigured as to present the appearance of a negro, the face being blackened, his lips swollen and everted, eyelids closed, hair and beard much singed, intense intolerance of light, and profuse lachrymation, with great suffering. The application of the carbolic acid and oil was followed by instant relief, and the oil becoming more fluid from the heat of the skin, ran over the skin with the appearance of thick ink. The result of this treatment was that on recovery, which was rapid, there was not the slightest discoloration of the skin, and the face in a very short time presented its natural appearance.—*Edin. Med. Jour.*

Among the books lately issued from the German press are—the new edition of Virchow's *Cellular Pathology*, much improved and enlarged; Prof. Traube's *Contributions to Physiology and Pathology*, a new instalment (the fifth) of Stricker's *Handbuch*; a treatise on Leuchæmia, by Prof. Mosler, of Greifswald.

Medical Miscellany.

LEGAL INJUNCTIONS.—In a foot-note to our quotation from *The New York Medical Record*, in our issue of December 7th, we were in error in stating that the injunction had been removed. We now quote from the *Record* of Dec. 15th, to show why and how the expulsion actually was accomplished. The matter was brought before the *Society*, and its By-Laws suspended for the purpose, *nem. con.*

"The attendance upon the meeting," says the *Record*, "was unusually large, and, as the result proved, every member was prepared to mete out strict justice. The presentation of the case in detail was unnecessary, as it was evident that every member had read the documents and thoroughly understood the importance of a prompt dismissal. The original charge had nothing to do with the question . . . the sole purpose being to vindicate the right of the Society to discipline its members in accordance with its own constitutional rights, to show to the profession at large that a member, who insults a body of gentlemen, by enjoining them from making a strictly professional report, preventing them from discharging their duties as honorable men, gets justice only by expulsion. The action of the Society in expelling on these grounds will receive the endorsement of the profession everywhere. The case was novel in reference to the injunction, and could only be properly disposed of by a suspension of the By-Laws. By such action, the Society places itself beyond the jurisdiction of any court of law, and establishes a principle which can be taken as a precedent by other bodies likewise afflicted by unruly and defiant offenders."

ACUTE SYNOVITIS—INCISION INTO THE JOINT.

—Mr. J. R. Jessop, F.R.C.S., in a lecture published by the *British Medical Journal*, states that he lately successfully followed Prof. Lister's plan, and incised into the knee-joint of a patient aged 20 years, who suffered from acute synovitis, after the ordinary treatment in such cases had been tried, i. e. rest, leeches, ice, evaporating lotions, salines, &c. Mr. Jessop made an opening in the joint, and in the axis of the thigh, commencing one inch above the patella, the opening was an inch long, but had to be enlarged to one and a half inches to allow flakes of lymph to pass through, which was suspended in from eight to ten ounces of clear fluid. From the time the incision was made, the excruciating pain ceased, the fever disappeared, the swelling never returned, and the patient was sent from the Leeds Infirmary to a convalescent hospital, with a movable, painless joint, within a month from the time of the operation.—*The Doctor*.

THE TITLE OF "DOCTOR."—The title of "Doctor" was invented in the twelfth century. Irnerius, a learned professor of law at the University of Bologna, induced the Emperor Lothaire II., whose chancellor he was, to create the title, and he himself was the first recipient of it. He was

made doctor of laws by that University. Subsequently the title was borrowed by the Faculty of Theology, and first conferred by the University of Paris on Peter Lombard. William Gordenio was the first person upon whom the title of Doctor of Medicine was bestowed; he received it from the College of Asti, in 1329.—*N. Y. Med. Gaz.*

TO CORRESPONDENTS.—Communications accepted:—Diseases of the Eye in Vienna.

BOOKS RECEIVED.—Lectures on the Clinical Uses of Electricity, delivered in the University College Hospital. By J. Russell Reynolds, M.D., F.R.S., &c. Philadelphia: Lindsay & Blakiston. 1872. Pp. 112.—Pulmonary Consumption: its Nature, Varieties and Treatment, with an Analysis of one thousand Cases to exemplify its Duration. By C. J. B. Williams, M.D., F.R.S., &c., and C. T. Williams, M.D., F.R.C.P., &c. Philadelphia: Henry C. Lea. 1872. Pp. 315. (From A. Williams & Co.)—The Principles and Practice of Surgery. By John Ashhurst, M.D., Surgeon to the Episcopal Hospital, &c. Illustrated with 633 Engravings on Wood. Philadelphia: Henry C. Lea. 1871. Pp. 1011. (From A. Williams & Co.)

PAMPHLET RECEIVED.—First Biennial Report of the State Board of Health of California, for the years 1870 and 1871. Pp. 113.

Deaths in eighteen Cities and Towns of Massachusetts for the week ending Dec. 16, 1871.

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston	113	Consumption 54
Charlestown	20	Pneumonia 20
Worcester	23	Typhoid fever 18
Lowell	22	Scarlet fever 17
Milford	4	Croup and Diphtheria 9
Chelsea	4	
Cambridge	8	
Salem	16	
Lawrence	6	
Springfield	2	
Lynn	13	
Fitchburg	3	
Taunton	3	
Newburyport	2	
Somerville	5	
Fall River	8	
Haverhill	5	
Holyoke	2	

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There were five deaths from smallpox; four in Boston, and one in Salem. Of the deaths from scarlet fever eight were in Worcester. Of the deaths from typhoid fever nine were in Boston and five in Fall River.

GEORGE DERRY, M.D.,
Secretary of State Board of Health.

DEATHS IN BOSTON for the week ending Saturday, Dec. 16th, 113. Males, 56; females, 63. Accident, 4—apoplexy, 2—inflammation of the bowels, 2—disease of the bowels, 1—bronchitis, 3—inflammation of the brain, 1—congestion of the brain, 2—disease of the brain, 2—cancer, 1—consumption, 22—convulsions, 1—croup, 1—debility, 3—diarrhoea, 1—dropsy, 1—dropsy of brain, 3—drowned, 1—diphtheria, 2—erysipelas, 1—eczema, 1—exhaustion, 2—scarlet fever, 2—typhoid fever, 3—disease of the heart, 5—hip disease, 1—imperforate anus, 1—leucorrhoea, 1—disease of the liver, 1—congestion of the lungs, 5—inflammation of the lungs, 6—marasmus, 3—old age, 1—paralysis, 3—puerperal disease, 2—pleurisy, 1—premature birth, 4—peritonitis, 1—rheumatism, 1—scrofula, 1—smallpox, 4—syphilis, 1—suicide, 1—whooping cough, 1—unknown, 1.

Under 5 years of age, 32—between 5 and 20 years, 16—between 20 and 40 years, 26—between 40 and 60 years, 18—above 60 years, 21. Born in the United States, 71—Ireland, 31—other places, 11.